Attachment H

Proposal # 2001- H 203 (Office Use Only)

PSP Cover Sheet (Attach to the front of each proposal)

Proposal Title: _____

Applicant Name: Southern Sonoma County Resource Conservation District

Contact Name: Leandra Swart

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J

Amount of funding requested: $ 545,170

Some entities charge different costs dependent on the source of the funds. If it **is** different for state or federal funds list below.

State cost _____ Federal cost _____

Cost share partners? ✓ **Yes** ___ **No**

Identify partners and amount contributed by each SEE TABLE IN SEC. F-2 "COST SHARE"

Indicate the Topic for which you are applying (check only one box).

- ☐ Natural Flow Regimes
- ☐ Nonnative Invasive Species
- ☐ Channel Dynamics/Sediment Transport
- ☐ Flood Management
- ☐ Shallow Water Tidal/ Marsh Habitat
- ☐ Contaminants
- ☐ Beyond the Riparian Corridor
- ☒ Local Watershed Stewardship
- ☐ Environmental Education
- ☐ Special Status Species Surveys and Studies
- ☐ Fishery Monitoring, Assessment and Research
- ☐ Fish Screens

What county or counties is the project located in? Sonoma

What CALFED ecozone is the project located in? See attached list and indicate number. Be as specific as possible 2 San Pablo Bay

Indicate the type of applicant (check only one box):

- ☐ State agency
- ☐ Public/Non-profit joint venture
- ☒ Local government/district
- ☐ University
- ☐ Other: _____
- ☐ Federal agency
- ☐ Non-profit
- ☐ Tribes
- ☐ Private party

Indicate the primary species which the proposal addresses (check all that apply):

- ☐ San Joaquin and East-side Delta tributaries fall-run chinook salmon
- ☐ Winter-run chinook salmon
- ☐ Spring-run chinook salmon
- ☐ Late-fall run chinook salmon
- ☐ Fall-run chinook salmon
- ☐ Delta smelt
- ☐ Longfin smelt
- ☐ Splittail
- ☒ Steelhead trout
- ☐ Green sturgeon
- ☐ Striped bass
- ☐ White Sturgeon
- ☐ **All** chinook species
- ☐ Waterfowl and Shorebirds
- ☐ All anadromous salmonids
- ☒ Migratory birds
- ☐ American shad
- ☒ Other listed T/E species: California Freshwater Shrimp

Indicate the type of project (check only one box):

- ☐ Research/Monitoring
- ☐ Watershed Planning
- ☐ Pilot/Demo Project
- ☐ Education
- ☐ Full-scale Implementation

Is this a next-phase of an ongoing project? Yes X No ___

Have you received funding from CALFED before? Yes X No ___

If yes, list project title and CALFED number Sonoma Creek Watershed Conservancy 1998-E02, 2000-E04

Have you received funding from CVPIA before? Yes ___ No X

If yes, list CVPIA program providing funding, project title and CVPIA number (if applicable):

By signing below, the applicant **declares** the following:

- The truthfulness of all representations in their proposal;
- The individual signing the form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or organization); and
- The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) and waives any and all rights to privacy and Confidentiality *of* the proposal on behalf of the applicant, to the extent as provided in the Section,

J Leah Swent, District Mgr.
Printed name of applicant

Leah Swent
Signature of applicant

Sonoma Creek Watershed Conservancy, 2001-2003

Amount requested: $545,170 of next-phase funding over two years. This cost is matched by $1,297,000 in other funding sources and in-kind contributions, of which $733,000 will be available at the start date of this proposed project.
Location: Sonoma Creek watershed (170 sq mi), Suisun Marsh/San Francisco Bay Ecozone
Project Type: Multi-objective proposal spanning Research/Monitoring, Pilot/Demo Project, Watershed Planning, and Education.

The Sonoma Creek Watershed Conservancy is a partnership of local stakeholders including:

Participants
Southern Sonoma County Resource Conservation District
Sonoma Ecology Center
Sonoma Valley Vintners & Growers Alliance
Sonoma Creek Adopt-A-Watershed

Collaborators (partial list)
San Francisco Estuary Institute
EPA Region IX, RWQCB
National Fish and Wildlife Foundation
California Coastal Conservancy
US Army Corps of Engineers

This collaborative alliance of stakeholders has a 4 year record of successful watershed planning and implementation work, including work funded by two previous CALFED grants. Outcomes of Conservancy activities improve habitat for steelhead, California freshwater shrimp, and other aquatic and riparian species in the local watershed, and enhance habitat values in San Pablo Bay to benefit all Bay-Delta anadromous species. The Conservancy's work is backed by extensive scientific and technical review from inside and outside the partners' organizations. In response to the 2000 PSP, we proposed a three year project and were funded for one year. We now request next-phase funding for two years.

Sonoma Creek's watershed has no dams, supports a diverse native fish community, and has a high level of public awareness to support restoration. This proposal addresses the watershed's needs for assessment, planning, education, and restoration actions. Proposed tasks will expand the Conservancy's existing efforts to inform and engage the public in watershed issues while providing critical data for adaptive management. The tasks relate to one general hypothesis; that if we assess conditions (watershed, ripariadaquatic, and fisheries), address identified stressors and limiting factors, restore and maintain key habitat types, and educate the community about watershed conditions and how they can improve them, we will improve fisheries and watershed health, in Sonoma Creek and the San Pablo Bay.

Proposed tasks respond to varying levels of uncertainty in our Conceptual Model: we propose research and assessment projects for areas of less certainty, and implementation projects where cause-and-effect relationships are more clear. Specifically, we propose to: 1) monitor a CALFED-funded fish passage solution, 2) monitor CALFED-funded pool enhancements, 3) remove a steelhead barrier and restore passage, 4) design a solution where a road bed is eroding into a spawning area, 5) provide technical assistance and monitoring for other small restoration projects, 6) continue analysis of factors limiting steelhead populations, 7) map land use and riparian condition, 8) continue learning historical ecological conditions, 9) implement vineyard demonstration projects, 10) fund watershed coordination, 11) conduct workshops on resource-related regulations, 12) assist teachers to teach an environmental and restoration curriculum, and 13) improve Web dissemination of results and activities.

Applicant Southern Sonoma County Resource Conservation District. Address 1301 Redwood Way, Suite 170, Petaluma CA 94954. Tax ID Number 94-2785937. Contact Person David Luther. Phone (707) 794-1242. Fax 794-7902. Email david-luther@ca.nacdnet.org.

C. PROJECT DESCRIPTION

Note: in this proposal, Sonoma Creek Watershed Conservancy partners will be referred by initials: Southern Sonoma County Resource Conservation District (SSCRCD), Sonoma Ecology Center (SEC), Sonoma Valley Vintners & Growers Association (SWGA), and Sonoma Creek Adopt-A-Watershed (SCAAW). Page numbers refer to ERP Vol. 1 unless otherwise noted.

C1a. Problem The Sonoma Creek watershed, and the San Pablo Bay downstream of it, have been transformed by human impacts, from its pre-European state with large floodplains and riparian corridors to one with extensive agriculture and increasing urbanization. Riparian corridors vanished, replaced by houses and farms, culverts and roads now interrupt anadromous fish migration, and a number of plant and animal species are now listed as threatened and endangered. Riparian and SRA habitat, and connectivity of those habitats, are of key functional importance for populations of species of concern; this region has a history of loss of these habitats (pp. 124, 131, 135). The watershed is listed as impaired for sediment, pathogens, and nutrients (State Water Resources Control Boards Impaired Waterbodies 303(d) list).

Sonoma Creek once had an internationally known steelhead fishery, but land use impacts are believed to have greatly diminished the local population. Here as elsewhere in the CALFED area, "[t]here is great scientific uncertainty as to why this at-risk species is in decline and how to best proceed with actions to facilitate recovery of this and other species." (ERP Goal 1). "The major factor limiting steelhead populations in streams are migration barriers and agricultural development including water diversion, barriers due to diversion dams, high water temperatures and other water quality impacts from urban and agricultural runoff (p. 126). The Sonoma Creek Watershed Enhancement Plan (SSCRCD, 1997), which included habitat typing by CDFG, and stream surveys by SEC, found that pool habitat is lacking in the watershed and may be limiting the steelhead fishery and freshwater shrimp. Reasons for this lack include loss of large woody debris in many reaches due to flood protection actions, private timber harvest, and conversion of riparian forest to agriculture and pasture. SEC's studies (SEC, 2000) of spawning gravels and water temperatures as limiting factors have allowed us to 'conditionally eliminate these possible constraints to local steelhead populations and proceed to study other possible limiting factors. There are many obvious barriers to steelhead migration in our streams — culverts, crossings, illegal dams, weirs, and diversions — which need to be removed or modified.

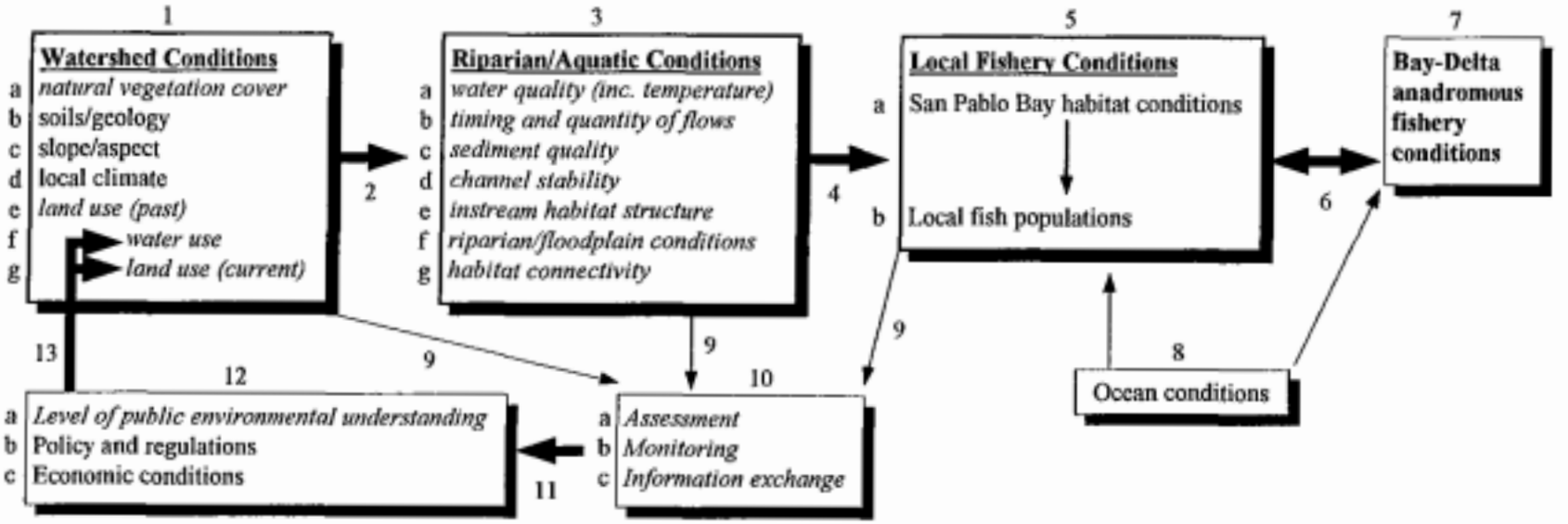
Other problems: 1) The San Pablo Bay, critical to all anadromous species that use the Delta, suffers from altered quality, quantity, and timing of water, sediment, and nutrients (ERP Vol. II; SF Estuary Project, 1998), 2) Progress toward achieving higher water quality, ecosystem restoration, and steelhead viability must be measured against some baseline condition. Data required for such a baseline are limited. 3) Education of the general public and local government staff must be improved if day-to-day human decisions are to benefit watershed health. 4) Land use practices must be addressed if a healthy economy and environment are to co-exist.

General objectives: improve habitat for steelhead, California freshwater shrimp, and other aquatic and riparian species in the local watershed, and enhance habitat values in San Pablo Bay to benefit all Bay-Delta anadromous species. Task-level objectives: several proposed tasks will remove barriers to steelhead migration, prevent and repair sedimentation into spawning areas, assess and map historic and current land use and habitat conditions, improve pool habitat by installing large woody debris, further study factors limiting steelhead, and improve local and regional awareness of watershed ecology and restoration.

C1b. Conceptual Model Since this is a proposal for Local Watershed Stewardship, our Conceptual Model (see diagram) illustrates how the actions of a Watershed Conservancy like

C1b. Conceptual Model

The work of the Sonoma Creek Watershed Conservancy addresses parts of the Conceptual Model that are italicized.



Distinctive characteristics of the Sonoma Creek Watershed
About 85% of the watershed is privately owned.
There are no sizable dams.
It has one of the best remaining native fisheries in the Sacramento/San Joaquin/San Francisco watershed (Rob Leidy, EPA).

ours can benefit ecosystem functioning. The Model for the Conservancy's work makes explicit the causal connections between land and water use and fishery conditions in Sonoma Creek's watershed and the Bay-Delta. It shows how information on watershed conditions can feed back into resource use patterns. Conservancy tasks work to improve and understand conditions (in the uplands, riparian/aquatic area, and the fishery) and improve information feedback.

There are vast uncertainties about how water use, land uses and specific management practices interact to affect riparian and aquatic biophysical conditions (1, 2 on diagram). We also do not **know** how historical changes have altered the relation of the watershed to riparian and aquatic conditions (1e, 2, 3). Much uncertainty still exists about which riparian and/or aquatic parameters, alone and in combination, are limiting the local fishery (4), and what the population size and structure is (5b). It is not **known** how much improvement in Sonoma Creek and other North Bay watershed health could improve San Pablo Bay's functioning (4), or how much improvements in San Pablo Bay could improve overall Bay-Delta fisheries (6). It is unclear how well planning and regulatory authorities can practice adaptive management based on information about biological and physical conditions within their jurisdiction (11).

C1c. Hypotheses being tested All the proposed tasks relate to one general hypothesis; that if we assess conditions (watershed, riparian/aquatic, and fisheries), address identified stressors and limiting factors, restore and maintain key habitat types, and educate the community about current watershed conditions and how they can improve them, we will improve fisheries and watershed health in Sonoma Creek and the San Pablo Bay. Conclusively testing this hypothesis is beyond our current means. However, proposed monitoring and research tasks (as well as other funded non-CALFED projects, see D2 on Other Ecosystem Restoration Projects) will yield useful information about parts of this general hypothesis.

The proposal addresses two ERP uncertainties. Task 6 continues a three-year investigation into a series of hypotheses concerning factors limiting at-risk species, in this case steelhead (Goals 1 and 3). Tasks 5 and 7 explore "how areas adjacent to to riparian zones and in particular agricultural lands influence ecological health" (PSP, p. 38). Task 8 addresses uncertainties about pre-disturbance conditions and processes.

C1d. Adaptive Management

Proposed tasks respond to varying levels of uncertainty in our Conceptual Model: we propose research and assessment projects for areas of less certainty, and implementation projects where cause-and-effect relationships are more clear.

Conservancy priorities and conclusions about the watershed are responsive to new information. For example, SEC started the Sonoma Valley Watershed Station with 1998 CALFED funding. One of its tasks was to systematically test a sequence of possible limiting factors for steelhead, based on the work plan drafted by SEC's TAC (SEC, 1997). From our 1998 CALFED proposal: "Although salmonid runs, primarily steelhead trout, are sustainable, critical rearing habitat for young of the year has become increasingly degraded by sedimentation and effects of urbanization including NPS pollution and thermal stress." SEC's studies since then (SEC, 2000) indicate that, in fact, water temperature and spawning gravel availability are likely not limiting factors. In response to these findings, Task 6 will allow us to examine other possible limiting factors: rearing habitat, water quality, and benthic macroinvertebrates.

Tasks 7 and 8 are research and assessment projects that address other areas of great uncertainty: current and historic riparian conditions and land uses. These assessments will aid in prioritizing restoration actions, and may inform efforts to understand and rehabilitate the San Pablo Bay. We will continue developing a quantitative basis for assessing significant impacts of

stressors and prioritizing restoration actions. **As** new data becomes available we can refine our Conceptual Model.

We have a greater level of certainty about several obvious, site-specific steelhead migration barriers (hence Tasks 1 and 3) or threatened spawning sites (hence Task 4) on Asbury, Carriger, and Sonoma Creeks. Task 2 addresses deficiencies in steelhead rearing habitat identified in previous assessments conducted by SSCRCD (1997) with assistance from CDFG. Task 9 implements well-understood, small-scale restoration actions. Tasks 11-12 address a clear need for improved ecological understanding among watershed residents.

Tasks 5, *6*, 7, **8,** and 13 are designed to contribute to adaptive management for the entire CALFED effort, either by conducting research and assessment, or by integrating and communicating results of Conservancy activities and monitoring.

Alternatives for watershed restoration were discussed and evaluated during development of the Sonoma Creek Watershed Enhancement Plan, and they continue to be discussed in the SEC TAC and at Watershed Conservancy meetings. Scientists among Conservancy and its collaborators provide QA/QC and data evaluation. Data synthesis and analysis is compatible with agency requirements. Year-end reports are produced and distributed to interested parties. The SEC's TAC and associates review any QAPPs, project designs, data analyses, and reports before final versions are approved. Data is used to adaptively manage restoration efforts, and to educate community members about their watershed and impacts they have on it.

C1e. Educational Objectives Many of the proposed tasks (Tasks **5-8,** *9,* 11-13) have large components emphasizing educating Sonoma Valley's population (40,000) and the CALFED-wide audience (thousands). We disseminate monitoring and research results via websites, the press, the Conservancy newsletter "Creek Currents" (550 recipients), and SEC's newsletter (250 recipients). We communicate regarding the process of collaboration in workgroups, conferences, and meetings. SEC has programs for volunteers (currently approximately 60/year) and university interns (10/year), which teach ecological concepts, watershed issues and stewardship, and fisheries science through hands-on monitoring, restoration, and research. All partners create materials for various sectors of the public and also conduct landowner outreach through newsletters, "awareness days," and short courses on timely topics. Many materials (such as an SSCRCD Creek Care Guide) are in English and Spanish. The proposed Conservancy website (Task 13) will aid our educational capacity and increase our audience. See Local Involvement and Qualifications for much more detail.

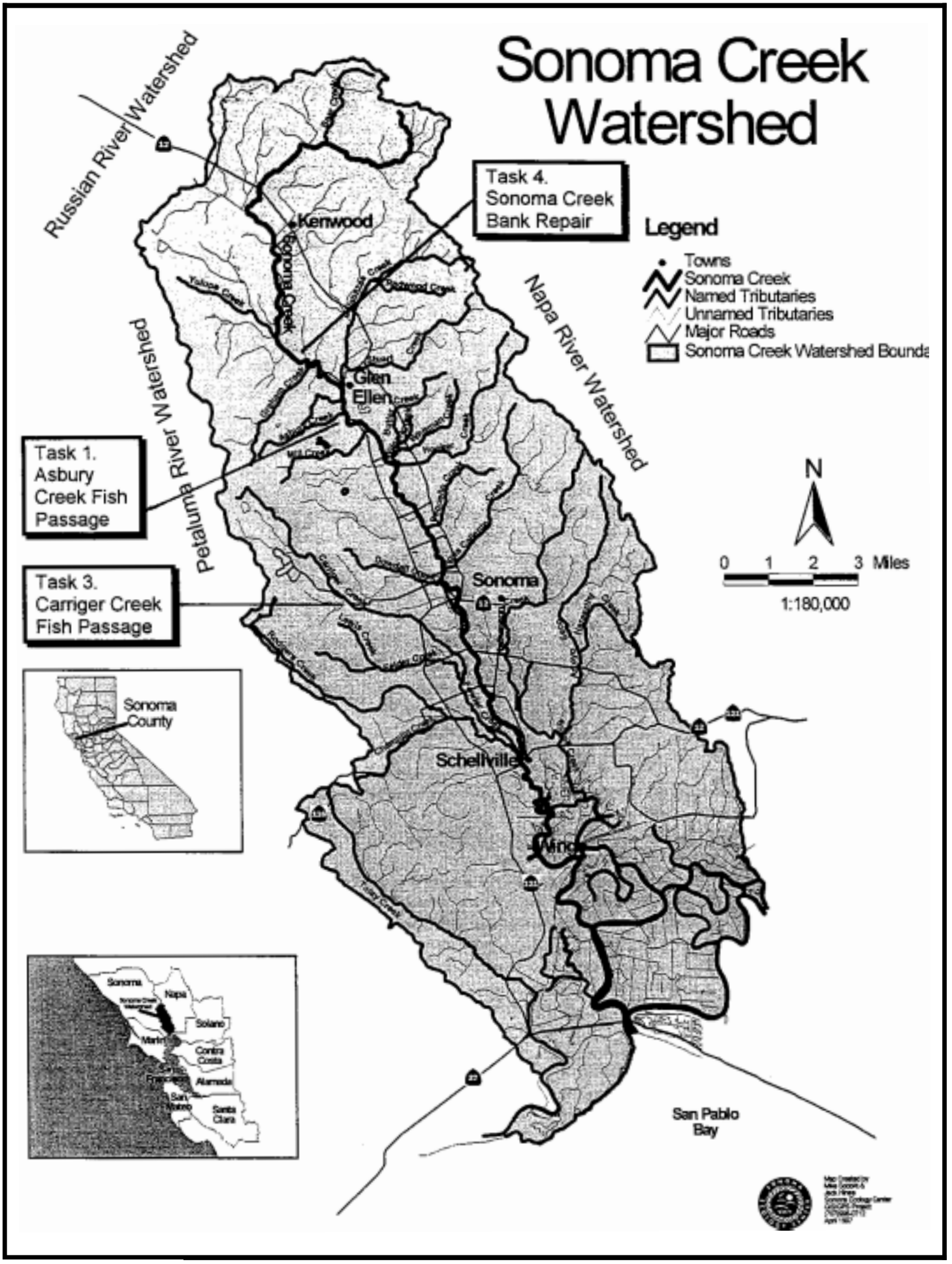
C2. Proposed Scope of Work

C2a. Location and Geographic Boundaries of the Project Sonoma Creek watershed (see map), California Hydrologic Map Unit Number 206.40, Sonoma County, Suisun Marsh/San Francisco Bay Ecozone. Watershed centroid (38.31 N, 122.49 W). Task 1 (38.36N, 122.52W) Task 3 (38.28 N, 122.50 W). Task 4 (38.40 N, 122.55 W).

C2b. Approach This proposal addresses every item in the Conceptual Model that the Conservancy partners are capable of addressing (see Summary of Tasks) . These include habitat restoration (improved land management practices, enhanced instream habitat, restored fish habitat connectivity, protection of stream setbacks), assessment and research (mapping riparian conditions and land uses, historical ecology, disseminating data back to locals and CALFED), watershed stewardship (teaching and encouraging Best Management Practices, especially those affecting steelhead and freshwater shrimp), and education (increased awareness on the part of residents and agencies). Funding for most of these tasks was included in our 2000 proposal.

Summary of Tasks

Task	Name	Partner	Conceptual Model	Adaptive Management Diagram
Fisheries Habitat Restoration				
1	Monitor Fish Passage Installation, Asbury Creek	SEC	3g, 5b, 10b	5, pilot/demo
2	Monitor Pool Habitat Restoration Sites	SEC	3e, 5b, 10b	5, pilot/demo
3	Restore Fish Passage, Carriger Creek	SSCRCD	3f, 3g, 5b, 10b	4, pilot/demo
4	Design Bank Repair and Habitat Enhancement, Sonoma Creek	SEC	3c, 3d	4
5	Technical Assistance and Project Monitoring	SSCRCD, SEC	1a, 1f, 1g, 3a-g, 9, 10a-c, 12a	4, 5, 6
Watershed Assessment				
6	Continuing Analysis of Factors Limiting Steelhead	SEC	3a, 9, 10a-c	1, 3, 6
7	Land Use and Riparian Assessment and Mapping	SEC	1a, 1g, 3d, 3f, 3g, 10a, 10c , 12a	1, 3, 6
8	Ecological History of Sonoma Valley	SEC	1e, 10a, 12a	1, 3, 6
Watershed Stewardship				
9	Vineyard Demonstration Projects	SVVGA	1a, 1f, 1g, 3a-g, 10c, 12a	4, 5, 6
10	Watershed Coordinator	SSCRCD	10c, 12a	5, 6
Environmental Education				
11	Workshops for Citizens and Landowners on Regulations Related to Watershed Health	SEC	12a, 13	N/A
12	Environmental Education Coordination	SCAAW	12a, 13	N/A
13	Web Development and Data Integration	SEC	10c, 11, 12a	6
Project Management				
14	Grant Administration and Project Management	SSCRCD	11	N/A


Sonoma Creek Watershed
Russian River Watershed
Petaluma River Watershed
Napa River Watershed
Task 4. Sonoma Creek Bank Repair
Task 1. Asbury Creek Fish Passage
Task 3. Carriger Creek Fish Passage
Legend
Towns
Sonoma Creek
Named Tributaries
Unnamed Tributaries
Major Roads
Sonoma Creek Watershed Bounda
Kenwood
Glen Ellen
Sonoma
Schellville
Mind
San Pablo Bay
N
0 1 2 3 Miles
1:180,000
Sonoma County
Sonoma
Napa
Solano
Marin
Contra Costa
Alameda
Santa Clara

1. Monitor Fish Passage Enhancement, Asbury Creek at Arnold Drive—SEC

Through CALFED grants in 1998 and 2000, a culvert modification allowing steelhead migration has been designed and will be implemented by fall 2000. As requested in 2000, funds are needed to monitor the success of the structures. We will visually assess structural integrity and measure water velocities and depths among the installed baffles, during design flows of two winters. Protocols will be developed with Entrix, Inc. who designed the installation.

2. Pool Habitat Enhancement and Restoration, Sonoma Creek Tributaries — SEC

This task covers 2 years of monitoring for a task funded by CALFED in 2000 to design, implement, and monitor restoration actions at 12 sites to increase the frequency and quality of pool habitat for steelhead trout and freshwater shrimp. Restoration designs will emulate natural channel hydraulic processes whereby large woody debris (LWD) provides scour to create and maintain pools. LWD placement will provide hydraulic diversity and cover to improve rearing conditions. Tasks will be supervised and conducted by a geomorphologist, riparian specialist, and/or fisheries biologist, with assistance from interns and Stream Stewards.

We will assess baseline conditions before LWD installation. After installation, during the low flow season, monitoring will consist ofcross-sectional surveys, photo-documentation, fish utilization surveys (with snorkeling or electrofishing), and monitoring reference pool sites.

3. Restore Fish Passage, Carriger Creek — SSCRCD. This project would begin the process to provide steelhead access to this once renowned trout stream. An old cement ford, 8' wide, has caused 8' of downcutting on its downstream edge. We will develop drawings for a rock weir fish ladder to replace this barrier. The design will address both the need for steelhead migration and the sediment eroding from collapsing banks beside the downcut. The site is ideal as an educational restoration project for Carriger Creek landowners who have already held two meetings concerning their sub-watershed. This project complements a CALFED-funded sediment and flow assessment by San Francisco Estuary Institute of this sub-watershed.

4. Bank Repair and Habitat Enhancement, Sonoma Creek at Warm Springs Road — SEC

In Kenwood, Sonoma Creek is actively eroding its streambank, threatening to undermine Warm Springs Road. A large pool which provides rearing habitat for steelhead is immediately adjacent to the erosion site. Spawning has been observed at the pool tail-out. Without pro-active management it is likely that the unstable bank will fail during a flood event, collapsing the roadway and causing rubble and fine sediments to enter the pool and spawning area. Repair of the streambank and roadway under emergency action will not allow time to plan measures to provide vegetative or instream cover, or to protect rearing and spawning habitat. SEC will develop a design to prevent bank failure, protect Warm Springs Road, and maintain and enhance cover elements associated with aquatic habitat. Design drawings will include material and construction specifications suitable for implementation and permitting. SEC will coordinate the project with CDFG, Sonoma County Permit and Resource Management Department, County Public Works, and National Marine Fisheries Service. It is anticipated that the County will fund implementation, and SEC will monitor project success using future funds.

5. Technical Assistance and Project Monitoring — SSCRCD, SEC

This task supports essential technology transfer functions of the Conservancy. Technical and professional staff at SSCRCD and SEC provide assistance to watershed landowners, agencies, and projects within the watershed. We disseminate information, suggest BMPs or restoration

strategies, make site visits and referrals, provide adaptive management oversight, and build partnerships. Where appropriate, Stream Stewards (see Task 6) will assist with monitoring for Conservancy projects with professional oversight.

6. Continuing Analysis **of** Factors Limiting Steelhead — SEC

SEC opened the Sonoma Valley Watershed Station with help from 1998 CALFED funds. The Station is a research and education facility with 5,000 sq ft of office, lab, and classroom space, dedicated to understanding and communicating about the natural systems of Sonoma Valley. Research and assessment efforts combine scientific expertise and, where appropriate, trained volunteer monitors called Stream Stewards (see Appendix for more detail).

In this task, Stream Stewards will be trained to use standard water quality testing kits following state-approved Coyote Creek Riparian Station protocols. Water quality monitoring will examine possible limiting factors such as temperature, DO, pH, sediment, nutrients, fecal coliform, and possibly pesticides (with donated assistance from certified laboratories).

Stream Stewards will also be trained in the DFG Stream Bioassessment Procedure, developed from EPA guidelines. Benthic macroinvertebrates (BMIs), a major food source for steelhead, may also be limiting. BMIs will be counted and identified to family level and data analyzed to draw conclusions about the biological health of the sampled site. BMIs are good indicators of stream quality because they are affected by the physical, chemical, and biological conditions of the stream and are extremely sensitive to pollution. They are a critical part of the aquatic food web. Changes in their abundance and variety may show the impacts from habitat loss not detected by traditional water quality assessments (Hauer and Lamberti, 1996)

7. Land Use and Riparian Assessment and Mapping A preliminary land use assessment for the watershed will be generated via photo-interpretation of USGS Digital Ortho Quarter Quads and 5 m satellite imagery. Volunteers will field check preliminary maps. The assessment will be compatible with EPA protocols and San Francisco Estuary Institute's Watershed Science Plan. Spatial extent of riparian areas will be delineated and land uses identified. This information will be used to develop a watershed map with information on land use, riparian zone width, stream hydrology and geomorphology.

8. Ecological History **of** Sonoma Valley — SEC

Current information about Sonoma Valley before European settlement does not provide a complete understanding of the ecological capacity of the watershed. Data on the native species and habitats that the watershed once supported will provide guidance for watershed restoration, particularly since Sonoma Creek has an unregulated streamflow. We particularly need information on specific questions of stream hydrology, riparian forest extent, and fisheries. Building on the fisheries oral history task funded by CALFED in 2000, this task would research, archive, and map historical information from documents, maps, photos, and personal communications that increases our understanding of the past and potential functions of the watershed. We will use San Francisco Estuary Institute's templates for database construction, including recording the level of certainty associated with each datum. This is a long-term project for which we are requesting funding for researching county bridge as-builts, interviews, consultations with SFEI, library research, digitizing and GIS mapping, and database construction. We will publicize data on the Web and communicate findings about sensitive species and habitats to local, state, and federal agencies as appropriate.

9. Vineyard Demonstration Projects — SWGA. The S W G A will work with willing vineyard

owners to design, implement and promote environmentally responsible vineyard Best Management Practices (BMPs). We will focus on environmental benefits for water quality, endangered species habitat and other wildlife. Improvements may include setbacks from riparian areas; streambank stabilization; terracing; flexible pipe drop; erosion reduction through use of cover crops, vegetated and rock lined drainage ditches; improved chemical application methods; Integrated Pest Management; and native riparian plantings. These actions will reduce sediment and chemical transfer, reduce water temperatures, provide protective cover for aquatic life forms, and reduce riparian erosion. Participating farms will present results and conduct demonstration events for the industry and to the public.

10. Watershed Coordinator – SSCRCD. The watershed coordinator provides continuity and program oversight of all watershed restoration and assessment projects; coordinates and facilitates bi-monthly meetings of Conservancy partners to review project data and progress reports; continues outreach and education efforts, holds local sub-watershed meetings with landowners to encourage better stewardship of the land; and produces a watershed newsletter to keep stakeholders and key constituents informed of watershed activity,
This past year, SSCRCD re-evaluated the Sonoma Creek Watershed Enhancement Plan and decided to refocus its outreach efforts to small local creek meetings to personalize the issue of conservation and expand landowner involvement in the Conservancy.

11. Workshops for Landowners and Groups on Regulations Related to Watershed Health—SEC Based on interest expressed by local residents and citizen groups, this task will expand the audience for workshops that were funded by CALFED in 2000. SEC will design and present workshops for local landowners and citizen groups on existing regulations that protect riparian and aquatic habitat. These include stream setbacks, erosion and pollution controls and practices that minimize common ecological problems arising from dominant land uses (e.g., vineyard, residential, dairy). We will review local zoning ordinances, general plans, state and federal regulations and other government documents relevant to land use. The workshops will convey the biological or geophysical basis for existing regulations and communicate the intent of the regulations beyond the letter of the law. We will present at least two workshops. The content and graphics from the workshops will be made available on the Web.

10. Educational Support for Watershed Restoration—SCAAW
SCAAW is a community-based non-profit that assists educators in implementing the Adopt-a-Watershed curriculum, an award-winning, sequential K-12 science curriculum. The program seeks to create active, skilled stewards who have a lifelong dedication to improving the environment, the community, and themselves. The Sonoma Creek watershed is used as a "living laboratory" where students engage in hand-on activities and progressively apply science concepts to field studies and restoration projects. SCAAW will expand environmental education efforts in Sonoma Valley Unified School District's elementary schools and launch the "Fish in Schools" program district-wide. We will introduce and discuss fish, streams, habitat, insects, and watersheds, to prepare students for studying fish in great detail in fifth grade. We will provide training, in-class support, field trip assistance, curricula, and essential lab materials so that elementary schools can teach focused, sequential science and prepare students to participate in the "Fish in Schools" program, in which students raise and release steelhead.

11. Web Development, Data Integration, and Posting of Activities and Results—SEC
As the scope of the Conservancy's activities grows, we have a greater need to communicate

within the watershed and to parties interested in our projects and our collaborative approach. The Conservancy website will present planning documents such as this proposal, updates on Conservancy activities, monitoring data, and meta-data discussions that suggest our future plans. The site will build on and be linked to partners' existing websites. Data systems will be compatible with the Interagency Ecological Program and CMARP, and catalogued with CERES. The Conservancy will be entered in the Natural Resource Projects Inventory and other lists.

12. Grant Administration and Project Management—SSCRCD. The SSCRCD will administer the grant and service contracts, and write quarterly and final reports.

C2c. Monitoring and Assessment Plans Tasks 1-3, 5 and 9 implement well-understood, small-scale restoration actions; therefore, monitoring for those tasks is limited to ascertaining if the action was successful. See table for details. Monitoring will be performed by professional staff at SSCRCD and SEC, as well as trained volunteers, where appropriate. Data collection protocols, QAPPs, data analysis, and draft reports will be reviewed by TAC members, qualified professionals with ties to the Conservancy, and appropriate agencies. Data will be evaluated in conjunction with publications about similar projects and appropriate agency guidelines to determine how to interpret the results.

C2d. Data Handling and Storage Qualitative and quantitative data from assessments, research, and monitoring will be placed into a database integrated with GIS layers compiled by the SEC. Data is also stored by individual Conservancy partners. Data, results, and interpretation are disseminated by final or yearly reports to interested parties. For other means of communication, see Local Involvement, Qualifications, and Educational Objectives. Data collected with public funds is available to the public. To the degree that is legal, we will try to respect the wishes of landowners who request anonymity. With funding for website development, findings will be more accessible.

C2e. Expected Products/Outcomes

All tasks will produce progress reports and final reports, and receive coverage in Conservancy and SEC newsletters, on websites of the Conservancy and its partners, in local press, and other outlets detailed in the Local Involvement and Qualifications sections. Additional deliverables are listed below by task. Outcomes are enumerated with task descriptions in the Approach section.

1. Monitoring photos.
2. 12 pools enhanced, LWD inventory report, enhancement design descriptions and drawings, post-construction report, cross-section surveys, photographs, fish utilization data.
3. Design drawings, site photos before and during monitoring, sign-in sheet from sub-watershed meeting, list of sub-watershed volunteers, permits, completed fish passage,
4. Plan, design drawings, baseline site data, permits.
5. Monitoring photos, list of Stream Stewards, status reports.
6. Data, peer review, list of Stream Stewards, map.
7. Maps, meta-data report, identify priority restoration locations.
8. Bibliography of information sources, list of interviewees, GIS database constructed, in-progress GIS layers and presentation maps, Watershed Council presentation.
9. List of participating vineyards, sign-in sheet from field day to review projects, list of conservation course participants, monitoring photos, design drawings, copy of conservation planning course manual.
10. Conservancy meetings, sub-watershed meetings, meetings agendas and minutes, quarterly

Monitoring Elements for Implementation Tasks

Task	Monitoring components	Success criteria	Experimental design
1	visual assessment, monitor depth and velocity of flow	Depth and velocity are adequate for fish passage.	monitor at site during design flow periods over two years.
2	fish surveys at project and reference sites: electrofishing or snorkeling	Presence of steelhead at project sites comparable to reference sites.	surveys at critical flow/ temperature period (late summer)
3	visual assessment, monitor depth and velocity of flow	Depth and velocity are adequate for fish passage.	monitor at site during design flow periods after installation.
5	photo-points, visual assessment	Stable soils and vegetation at project sites; run-off clear.	pre-project monitoring; post monitoring during and after storm events
9	photo-points, visual assessment	Stable soils and vegetation at project sites; run-off clear.	pre-project monitoring; post monitoring during and after storm events

newsletters, monthly report to SSCRCD Board, revised outreach approach to implement the Sonoma Creek Watershed Enhancement Plan.
11. Summary of content from workshops, diagrams, maps, list of participants.
12. Photo-documentation, training sign-in sheets, monthly reports to SCAAW Board and Watershed Coordinator.
13. Website, monitoring and assessment data, reports, graphics, maps, and links to other sites.
14. MBE/WBE form, sub-contracts.

C2f. Work Schedule See timeline

C2g. Feasibility All proposed tasks are based on sound information and prioritization processes. They use reliable, time-tested methods such as CDFG's Stream Bioassessment Procedure, San Francisco Estuary Institute's approach to historical ecology research, and standard vineyard BMPs. All tasks are ready to begin immediately upon contracting. Most of the tasks continue programs we have already begun or have discussed with relevant agencies, landowners, and experts. See Qualifications for our personnel's suitability to these tasks.

The Conservancy, with its established technical capacity and public support, can accomplish restoration, assessment, and education at lower cost than agencies can. Since the Conservancy already has broad-based buy-in from the community, its work is well-received and maintained.

All Conservancy work is done with willing landowners. Partners have invested thought and effort into developing respectful yet reasonably efficient methods of gaining access to sites, particularly streambanks. The generally high public opinion of Conservancy partners eases this process. Potential adverse third party impacts include noise and inconvenience from the presence of heavy machinery and temporary increases in sediment loading during restoration activities.

Permitting and access: There are no obstacles foreseen that will hinder implementation of any element of this proposal. These projects have had preliminary site analysis and design and planning review and are ready for hnding. Several landowners have already expressed an interest in supporting Conservancy efforts. See attached permission letters. All restoration projects (Tasks 1-4) will require permits from California Department of Fish and Game (CDFG). For Task 2, workshops funded by CALFED in 2000 will identify potential restoration sites and willing landowners. Task 4 may require permits from NMFS and/or Sonoma County Department of Public Works.

D. Applicability to CALFED ERP Goals and Implementation Plan and CVPIA Priorities
Dl. ERP Goals and **CVPJA** Priorities
Conservancy projects help achieve several ERP goals and benefit many target species. Directing resources to relatively healthy watersheds, particularly those in the North Bay, is a highly efficient way to leverage limited finding for maximum benefit to the entire CALFED area (Robert Leidy, EPA, speech at 1999 State of the Estuary Conference, San Francisco).
1. At-Risk Species. For Sonoma Valley, proposed tasks target non-oceanic life stages of steelhead, and California freshwater shrimp. For the Bay-Delta, they benefit all species and life-stages using the San Pablo Bay. "All Central Valley anadromous fish pass through the North Bay and rely on it for some stage of their lives... The health of the North Bay affects the health of Sacramento/San Joaquin watersheds and their salmonid populations." (ERP, Vol. 11, p. 142). Proposed tasks will create durable improvements to habitats and populations of at-risk species, and "resolve conflicts between water management/land use and listed species."
2. Ecosystem Processes. Both in the near term and over the long term, proposed tasks will provide more natural sediment, water, and nutrient supplies to the San Pablo Bay and to streams

1st Year TIMELINE

	Oct-01	Nov-01	Dec-01	Jan-02	Feb-02	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02
Habitat Restoration													
Task 1 Monitor Asbury Fish Passage	monitoring plan		monitor during storms										
Task 2 Monitor Pool Habitat Enhancements	baseline conditions									monitor			
Task 3 Carriger Creek Fish Passage	site review			develop plan					plan review	plan complete		permits: apply	
Task 4 Design Bank Repair, Enhance't											site review		
Task 5 Technical Assistance, Monitor	ongoing, as needed												
Watershed Assessment													
Task 6 Limiting Factors Analysis						training		collect data		collect data	compile data		
Task 7 Land Use & Riparian Mapping	research data sources				train volunteers		fieldwork		fieldwork		mapping		
Task 8 Ecological History		set up database		SFEI consult		library research	digitize		acquire photos			digitize	
Local Watershed Stewardship													
Task 9 Vineyard Demonstration Projects	develop, distribute RFP	review sites & BMPs	select projects						start const.				
Task 10 Watershed Coordinator	conduct outreach	SCWC meeting		SCWC meeting		SCWC meeting		SCWC meeting		SCWC meeting		SCWC meeting	
Environmental Education and Outreach													
Task 11 Workshops						workshop							
Task 12 Adopt-A-Watershed		teacher training				teacher training	onsite activity		onsite activity	teacher training			
Task 13 Website		research design		create structure		maintenance ongoing							
Project Management													
Task 14 Administration				quarterly report			quarterly report			quarterly report			quarterly report

2nd Year Timeline

	Oct-02	Nov-02	Dec-02	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	Oct-03
Habitat Restoration													
Task 1 Monitor Asbury Fish Passage			monitor during storms										report
Task 2 Monitor Pool Habitat Enhancements										monitor	analysis		report
Task 3 Carriger Creek Fish Passage	receive permits									start const.		finish const.	report
Task 4 Design Bank Repair, Enhance't				design drawings complete				receive permits					report
Task 5 Technical Assistance, Monitor	ongoing, as needed												
Watershed Assessment													
Task 6 Limiting Factors Analysis						training		collect data		collect data	compile data		report, maps
Task 7 Land Use & Riparian Mapping								field check		field check			maps, report
Task 8 Ecological History		search county records			SFEI consult	library research		interviews					report, maps
Local Watershed Stewardship													
Task 9 Vineyard Demonstration Projects	develop, distribute RFP	review sites & BMPs	select projects						start const.				report
Task 10 Watershed Coordinator	conduct outreach	SCWC meeting		SCWC meeting		SCWC meeting		SCWC meeting		SCWC meeting		SCWC meeting	
Environmental Education and Outreach													
Task 11 Workshops						workshop							report
Task 12 Adopt-A-Watershed		teacher training				teacher training	onsite activity			onsite activity			
Task 13 Website	maintenance ongoing												all results posted
Project Management													
Task 14 Administration				quarterly report			quarterly report			quarterly report			final report

in Sonoma Creek watershed. If the San Pablo Bay's role as nursery and feeding ground is to be maximized, habitat and water quality conditions in the San Pablo Bay watershed must be maintained and improved (p. 142). Ecological factors having the greatest influence on North Bay and marsh fish and wildlife include freshwater inflow from rivers, wetlands, riparian vegetation, and aquatic habitat diversity (p. 120). Improving ecosystem processes helps reverse downward population trends of native riparian and aquatic species that are not yet listed, and prevent establishment of non-native species.

3. Harvestable Species (see Goals 1, 2).

4. Habitats. Proposed tasks will improve three habitats: Aquatic riverine habitat: pool structure, wood and sediment inputs, and habitat connectivity. Riparian habitat: conditions assessment to guide future restoration of functional connectivity. Aquatic food web in San Pablo Bay: improving sediment, water, and nutrient inputs and timing.

5. Sediment and Water Quality. Increase awareness of urban and agricultural effects on water quality, improve land use practices to reduce sedimentation, water temperatures, and water diversions.

Applicability to other CALFED Programs: SEC has been actively and continuously involved in creating the CALFED Watershed Program as a member of the Watershed Workgroup. The Conservancy's approach directly reflects the approach outlined by the Watershed Program Plan. This proposal also complements Water Quality Program goals by improving the quality of inflows to San Pablo Bay, benefiting all organisms living in and passing through the North Bay. It addresses water quality concerns at their source (ERP p. 18 Vol I).

D2. Relationship to Other Ecosystem Restoration Projects

This proposal's tasks strengthen an existing collection of diverse projects that all work toward a healthy local watershed, a more informed watershed population, and an enhanced San Pablo Bay fisheries environment. See Cost-Sharing.

Past projects: This project will complement previous efforts including SWRCB 205(j) funding for the Sonoma Creek Watershed Enhancement Plan (SSCRCD, 1997), 319(h) funding to reduce sedimentation and other non-point source pollutants and monitor relations between upland conditions and water quality (SEC), and two years of CALFED funding for scientific studies of limiting factors to anadromous fish, restoration projects and community outreach. See Appendix for past and current CALFED-funded projects.

Current projects: Task 2 complements a CDFG grant to hold workshops for riparian landowners to educate them about Best Management Practices for fishery and riparian improvement, and to gain access to appropriate fisheries restoration sites. Several tasks are complemented by funds from Sonoma County Water Agency to assess low flow conditions, begin mapping riparian corridors, begin a fish population study, design a water quality sampling program, and recruit Stream Stewards.

Future projects: SSCRCD and SEC are beginning partnerships with the US Army Corps of Engineers on the San Pablo Bay Study and the RWQCB on TMDL development for the North Bay. Future Conservancy projects will include adding agency and landowner partners, continuing analysis of factors limiting steelhead, examining water and sediment trends in the Valley, using resource assessments to prioritize restoration actions, addressing conflicts between agricultural and environmental interests, and drawing causal connections between specific land and water use practices and water quality and habitat conditions in nearby streams.

D3. Requests for Next-Phase Funding (see Appendix for summary of existing project status)
Most of the proposed 2001 tasks (1, 2, *6*, *7*, 9, 10, 12, 14) are simply the second and third years

of tasks proposed in 2000. Tasks 5, 8, and 11 are expansions of tasks proposed in 2000. Three tasks (3, 4, and 13) are new or revised since last year, as the Conservancy responds to new information and needs in the watershed.

D4. Previous Recipients of CALFED or CVPIA funding

Previous CALFED funding: 1) Sonoma Creek Watershed Conservancy, Watershed Restoration Program M113 1998-EO2 and 2) Sonoma Creek Watershed Conservancy 2000-E04. See Appendix for status of these projects. Most tasks in this 2001 proposal are next-phase and continuation projects tightly linked to both previous CALFED grants. For example, Task 1 proposes monitoring for a fish passage project designed with 1998 funds and implemented with 2000 funds.

D5. System Wide Ecosystem Benefits From its beginnings, the Conservancy has served as a model of how collaborations across traditional interest groups can accomplish changes in attitudes, knowledge, and on-the-ground conditions. Through our continued commitment to working with each other and communicating with other groups, we inform both the scientific and community-building aspects of watershed improvement. Sonoma Creek is relatively healthy. In the whole CALFED area, Sonoma Creek is one of the most cost-effective areas in which to invest restoration dollars (Rob Leidy, EPA, see support letter).

E. Qualifications

The Conservancy assures a broad-based, thoroughly informed, ecosystem approach to watershed management through joint meetings with its diverse partners, technical advisors, and agency personnel, and through continual information gathering from conferences, literature, and organizations in other watersheds. Technical professionals inside and outside the Conservancy have been engaged with the ecological issues facing the Sonoma Creek watershed and San Pablo Bay for years. This long-term information base, plus the input of experts, assures the fundamental soundness of the Conservancy's approach. Specifically, we have had guidance from Paul Jones and Rob Leidy at the EPA Region IX, Bill Hurley and Mike Napolitano from the Regional Water Quality Control Board, Bill Cox of the California Department of Fish and Game in Yountville, Josh and Laurel Collins and Robin Grossinger of the San Francisco Estuary Institute, and Mike Rigney, formerly of the Coyote Creek Riparian Station. SEC participates actively in the Watershed Workgroups of CALFED and the California Biodiversity Council. SSCRCD and SEC are on the Creeks Committee of the San Francisco Bay Joint Venture and the TAC of the Wild on Watersheds program (CA Association of RCDs, SWRCB).

Alternatives for watershed restoration were discussed and evaluated during development of the Sonoma Creek Watershed Enhancement Plan and continue to be discussed in the SEC TAC and at Conservancy meetings. Scientists in the Conservancy and its collaborators provide QA/QC and data evaluation. Data synthesis and analysis is compatible with agency requirements. Year-end reports are produced and distributed to interested parties. The SEC's TAC and associates review any QAPPs, project designs, data analyses, and reports before final versions are approved. Data is used to adaptively manage restoration and rehabilitation efforts, and to educate community members about their watershed and impacts they have upon it.

The proposed tasks will be managed by a Watershed Coordinator at SSCRCD with direction from the SSCRCD Board of Directors, and the SEC's TAC. The Watershed Coordinator will report to the SSCRCD Board on a monthly basis. Funding for partners will be allocated by SSCRCD, who will be accountable for products and deliverables to CALFED. Conservancy partners meet bi-monthly to assure continuity and communication between Conservancy tasks.

Shreve LaFramenta, Executive Director. SCAAW
Shreve works with teachers in Sonoma Valley to assure that they receive the support they need to teach localized curriculum that includes hands on activities in the living laboratory of the Sonoma Creek Watershed. In addition, he coordinates local landowners and community groups to support the work of local teachers.

F. Cost

F1. Budget See budget table.

WE STRONGLY PREFER THAT FUNDING EXTEND FOR **TWO** YEARS.

Each task is a needed element in the Conservancy's long term program to improve the ecological health of Sonoma Creek and San Pablo Bay. However, if the total cost will not be funded, we request that CALFED eliminate individual tasks and retain the proposed two-year timeline.

Overhead: Except as noted, overhead (where applied) is 18%. This reflects rent, phone, utilities, and non-SSCRCD staff time for grant administration.

Task 1: Geomorphologist. $70/hr; 15% benefits; two site visits/year; report. Supplies: photographic.

Task 2: Geomorphologist/fisheries biologist. $75/hr; 15% benefits. 100 hours over two years. Cross-sectional surveys, photo documentation, fish utilization surveys, written report. Supplies: photographic and survey supplies.

Task 3: Engineering Technician. $43/hr. 247 hours over two years. Sub-contract management, design review, permitting, installation oversight, monitoring, report. $10,000 sub-contract: project design, construction drawings. $12,000 sub-contract: project installation. $35,000 supplies: construction materials and materials transport.

Task 4: Contract Manager. $35/hr; 15% benefits. 120 hours over two years: Sub-contract management, design review, report, resource development for project installation and monitoring. Sub-contract to Entrix, Inc. for project design, permitting, construction drawings: Civil Engineer: $140/hr: 16 hours; Hydrologist/ Geomorphologist: $100/hr: 20 hours; Fish Biologist: $100/hr: 16 hours; Riparian Ecologist: $75/hr: 12 hours; Field Aide and AutoCADD technician: $70/hr: 32 hours. Sub-contract total: $11,220.

Task 5: Engineering Technician/Riparian Ecologist. $43/hr. 400 hours over two years. Site assessment, landowner consultations, demonstration project development, establish monitoring locations, monitoring and assessment, reports.

Task 6: Technical Coordinator. $30/hr. 15% benefits. 480 hours per year, 2 years. Protocol development, QAPP, establish monitoring sites, intern and Stream Stewards training/oversight, data collection and reduction. Biologist/Geologist. $65/hr. 15% benefits. 80 hours per year, 2 years. Technical oversight, QAQC, data analysis, written reports. Service Contract for technical consulting to Stream Stewards program. Supplies for field and laboratory data collection and processing.

Task 7: Riparian Ecologist/Technical Coordinator. $40/hr; 15% benefits. 100 hr/yr, 2 years. Project oversight. Intern and Stream Steward oversight. Field study design. Data analysis. Written report. GIS Technician/Biologist. $45/hr; GIS Intern. $20/hour. 15% benefits. 300 hr/yr, 2 years. Data/mapping methods. GPS data collection. Remote image/GPS data processing. Preliminary and final maps. Supplies: digital data; field supplies, storage media, printing.

Task 8: Biologist/GIS Technician. $40/hr. 15% benefits. 228 hr/yr, two years. Project management, supervision of interns and volunteers, historical records/literature search, interviews, database development, mapping. Contract Services: SFEI: Robin Grossinger. Project design, GIS presentation consulting. Supplies: document duplication, photo-processing, printing

Task 9: Administration: 21.8 %. Administer matching grant program. Service contract:

Technical consulting for vineyard managers.
Task 10: Resource Conservationist. **$35** per hour. 1020 hr/yr, two years. Project oversight/management for Conservancy projects. Liaison between Conservancy partners, between Conservancy and CALFED, and between Conservancy and public. Supplies: newsletter printing and distribution.
Task 11: Information coordinator. $30/hr. 15% benefits. 80 hr/yr, two years. Web design and maintenance. Integration of Conservancy partner project related information and reports.
Task 12: District manager $47/hr. 410 hr/yr, 2 years. Technical and administrative services for contract. Supervision and review of project tasks.

F2. Cost-Sharing Contributions from volunteers, interns, landowners, and local scientists are considerable in Sonoma Valley, decreasing costs of stake-holder supported watershed activities. The table below details funding committed to Conservancy projects as of May 2000. Asterisked funds will be available at the start date of this proposed 2001 project.

Source	Description	Partner(s)	Status	Amount in 1000's
US Army Corps of Engineers; CA Coastal Conservancy; SEC (in-kind)	hydrologic studies as Phase 1 of a project for flood prevention near Schellville and restoration in lower Sonoma Creek's floodplain	SSCRCD, SEC	tentative approval	$400*
RWQCB 319(h)	rehabilitate eroding State Park trails, monitor sediment production	SEC, CA Dept Park & Rec.	contract	$309 total/$75 for monitoring*
CALFED (2000)	see Appendix	Conservancy	approval	$438
CALFED (2000)	Arundo donax eradication in Northern California streams	SEC/ Team Arundo del Norte	approval	$818 total / $68 for eradication in
CA Dept of Fish and Game	Riparian landowner education and outreach	SEC	contract	
Sonoma County Water Agency	GIS base map, infrastructure and resource mapping for Sonoma Valley watershed	SEC	contract	$125 total/$57 for base andd resource
Sonoma County Water Agency	fish census, low-flow survey, riparian mapping, etc.	SEC	contract	
Sonoma Valley Harvest Wine Auction	Restoration projects, land use mapping	SEC	contract	$18*
Sonoma County Water Agency	stream gage, fish census, or project to be determined	SEC	pending	
volunteers	Stream Stewards program; restoration work days. 2000 hr/yr @ $10/hr			
interns	500 hr/yr @ $15/hr			$15*
pro bono professional	200 hr/yr @ $85/hr			$34*
TOTAL				**$1,297**
TOTAL at Start Date				$733*

Sonoma Creek Watershed Conservancy, 2001-2003

Year 1– Budget

Task	Direct Labor Hours	Salaries	Benefits	Travel	Supplies	Service Contracts	Overhead (18%)	Total Cost
Steelhead Habitat Restoration								
1 Monitor Asbury Fish Passage	18	$1,260	$189		$200		$297	$1,946
2 Monitor Pool Enhancements	100	7,500	1,125		500		1,643	10,768
3 Carriger Creek Fish Passage	76	3,268				10,000		13,268
4 Bank Repair and Enhancement	80	2,800	420			11,220	2,599	17,039
5 Technical Assistance and Monitoring	400	17,200						17,200
subtotal								60,221
Watershed Assessment								
6 Limiting Factors Analysis	560	19,600	2,940		3,000	1,000	4,777	31,317
7 Land Use and Riparian Mapping	400	15,000	2,250		3,000		3,645	23,895
8 Ecological History	260	9,120	1,368		1,000	1,500	2,349	15,337
subtotal								70,549
Watershed Stewardship								
9 Vineyard Demonstration Projects					30,000	2,700	6,800 (22%)	39,500
10 Watershed Coordinator	1,020	35,700			3,000			38,700
subtotal								78,200
Environmental Education								
11 Workshops	40	1,800	270	100	200		427	2,797
12 Adopt-A-Watershed	1,000	20,000			5,052		1,500	26,552
13 Web Development	80	2,400	360				497	3,257
subtotal								32,606
Project Management								
14 Administration	410	19,250						19,250
subtotal								19,250
CALFED Request – Year 1								**$260,826**

Year 2– Budget

Task	Direct Labor Hours	Direct Salary	(Benefits	Travel	Supplies	Service Contracts	Overhead (18%)	Total Cost
Steelhead Habitat Restoration								
1 Monitor Asbury Fish Passage	36	$2,520	$3781		$200		$558	$3,656
2 Monitor Pool Enhancements	100	7,500	1,125		500		1,643	10,768
3 Carriger Creek Fish Passage	171	7,353			35,000	12,000		54,353
4 Bank Repair and Enhancement	40	1,4001					315	1,715
5 Technical Assistance and Monitoring	400	17,200						17,200
subtotal								87,692
Watershed Assessment								
6 Limiting Factors Analysis	560	19,6001	2,940		3,000	1,000	4,777	31,317
7 Land Use and Riparian Mapping	4001	15,0001	2,2501		3,000		3,645	23,895
8 Ecological History	260	9,100	1,365		1,000	1,500	2,349	15,314
subtotal								70,526
Watershed Stewardship								
9 Vineyard Demonstration Projects					30,000	2,700	6,800 (22%)	39,500
10 Watershed Coordinator	1020	35,7001			3,000			38,700
subtotal								78,200
Environmental Education								
11 Workshops	40	1,800	270	100	200		427	2,797
12 Adopt-A-Watershed	10001	20,0001			4,000		250	24,250
13 Web Development	40	1,200	180				248	1,628
subtotal								28,675
Project Management								
14 Administration	410	19,250						19,250
subtotal								19,250
CALFED Request – Year 2								**$284,343**
TOTAL CALFED Request, Years 1 and 2								**$545,170**

* indicates personnel involved in study design, monitoring, and evaluation of results

David Luther - Resource Conservationist. SSCRCD
David has served as Watershed Coordinator for two years and will continue in this position. He graduated from the University of Oregon with a Bachelor of Science in Biology with a focus in Ecology. He is also Project Manager for the Petaluma River Watershed Enhancement Plan.

*Paul Sheffer - Engineering Technician. SSCRCD
Paul will provide engineering and technical assistance for SSCRCD projects. Paul has over 30 years experience working with the Natural Resources Conservation Service and more than five years with SSCRCD. He is currently provides engineering services to SSCRCD and serves as North Bay Forum Project Manager. Mr. Sheffer is an accomplished poet.

Leandra Swent – District Manager. SSCRCD
Leah is SSCRCD's District Manager. She oversees the Watershed Coordinator, and all district staff and projects. She will serve as financial manager.

Richard Dale. Executive Director. SEC
Richard will supervise SEC projects. He holds a degree in Environmental Studies from UCSC and is the 1997 recipient of the john Muir Award for his national and local conservation efforts. In 1990 he co-founded the SEC, whose programs include a six acre community farm, a regional GIS project, public education projects, and two habitat preservation projects.

*Caitlin Cornwall. Biologist. SEC
Caitlin holds degrees in biology and botany. Her experience spans consulting work in wetland and riparian assessment and restoration; academic research on the ecology, hydrology, and geomorphology of streams and riparian plant communities; and conservation biology and project management for SEC. She will implement portions of Tasks 2, 4-8, and 11.

*Mitchell Katzel. Geomorphologist, SEC
Mitchell is a project hydrologist/geomorphologist at Entrix, Inc. with 10 years of experience in water resources planning. He has a broad range of technical expertise, including investigations and studies related to surface water hydrology, fluvial geomorphology, sediment transport, and stream restoration. Mitchell is versed in environmental assessment and permitting requirements for projects subject to NEPA review. He will oversee and implement Tasks 1, 2, and 4, and provide technical input on Tasks 5-8 via SEC's TAC.

*Kristi Pier, Coordinator for Stream Stewards Program and Volunteers. SEC
Kristi manages SEC's programs for training watershed residents to contribute to ecosystem restoration. She has a BA in Environmental Studies, experience in marine ecological research, and training in water quality and bioassesment monitoring in wadeable streams.

Rich Hunter. GIS/GPS Project Manager. SEC
Rich's experience is in using GIS technology for gap analysis and restoration prioritization. He will manage mapping and GIS database construction tasks.

Chris Finlay. Executive Director. S W G A
Chris will coordinate projects for S W G A projects. She has worked with SSCRCD on Vineyard Demonstration projects for several years, and with the Department of Pesticide Regulation to implement an Integrated Pest Management Program in the Sonoma Valley.

G. Local Involvement

This proposal continues the work of a diverse Watershed Conservancy that has support and involvement from state and federal legislators, USDA Natural Resources Conservation Service, National Marine Fisheries Service, California Department of Fish and Game, Environmental Protection Agency, US Fish and Wildlife Service, California Farm Bureau, State Water Resources Control Board, California Department of Parks and Recreation, the Universities of California at Berkeley and Davis, Sonoma County Water Agency, Sonoma State University, Santa Rosa Junior College, Bouverie Audubon Preserve, and local government and business groups. These include Rotary and Kiwanis Clubs, Sonoma Sister Cities Association, Sonoma Community Center, Sonoma City Planning Department, Planning Commission, and Community Services Commission, Valley of the Moon Boys and Girls Club, Sonoma Valley Unified School District, Sonoma Valley Chamber of Commerce, and Sonoma Valley Visitors Bureau.

The Conservancy engenders participation by diverse community-based interests. Past efforts have proved successful in communicating the vision of restoration and stewardship and involving various sectors of the community in specific projects. Previous projects have been embraced by the local community and resource agencies. They have served to educate and involve the public, soliciting a strong and more informed segment of community support. Many agencies who in the past were either uninformed or unwilling to participate have realized the importance of watershed issues and the value of their support through the success of these former projects. The achievement gained in both the natural and human community from these past watershed projects has given a sense of credibility to the current proposal and allowed it to be strongly supported by state and regional agencies and the local community.

A strong liaison exists with local newspapers who frequently publish stones on environmental issues. When appropriate, press releases are sent out for publication. SEC's executive director writes a semi-weekly column on environmental issues. Various Conservancy members have developed oral presentations and slide shows which are offered to businesses, community groups, schools, and agencies. SEC's Sonoma Valley Watershed Council, a forum for discussing environmental topics every two months, promotes community awareness and involvement in local issues. Findings are published for public review through presentation at a watershed education event put on by Conservancy partners called "Creek Day."

H. Compliance with Standard Terms and Conditions

Applicant will comply with state and federal standard terms

I. Literature Cited

Hauer, FR, and GA Lamberti. 1996. Methods in Stream Ecology. Academic Press. London.

San Franciso Estuary Project. San Francisco Estuary Baylands Ecosystem Goals, Draft Report for Public Review. 1998.

SEC Technical Advisory Committee. 1997. Sonoma Creek Work Plan. ***Goals, sequence of work, to address the fishery, riparian health, and water quality and quantity.***

SEC. 1997. **A** Day on Sonoma Creek. ***Reviews existing data on runoffand discharge, water temperature, water quality, environmental history, and fish habitat.***

SEC. *2000.* 1998 Salmonid Spawning Gravels Survey. Mitchell Katzel, Oona McKnight. ***Presents results and analysisfrom a survey using EPA-approved QAPP.***

SEC. 2000. 1998 Water Temperature Monitoring. Oona McKnight, Mitchell Katzel. ***Results and analysis from 2 years of monitoring using EPA-approved QAPP.***

SSCRCD in conjunction with the people of the Sonoma Creek Watershed. 1997. Sonoma Creek

Watershed Enhancement Plan. ***Appendices contain other studies and reports.***
SSCRCD. 1996. Sonoma Creek Habitat Inventory.

Appendix: Status **of** Existing Sonoma Creek Watershed Conservancy CALFED Projects

General Description

The Sonoma Creek Watershed Conservancy has received two previous grants from CALFED. The Conservancy's partners, goals, Conceptual Model, hypotheses, adaptive management framework, approach, partners' roles, and scientific qualifications are as described in the appropriate sections of the body of this proposal.

Project Status: CALFED 1998-E02, $301,000 Project Deadline: April 2001

Task 1 Restoration and Enhancement Projects

1.1 Streambank Stabilization Demonstration: Carriger Creek. Initial construction phases completed. Fish barrier found upstream, hence 2001 request for funding *to* re-create fish passage. Fiscal status 84% complete.

1.2 Riparian Corridor Enhancement: Streambanks were resloped and planted on Nathanson Creek, with help from 25 Adopt-A-Watershed children. Project near completion. Fiscal status 45% complete.

1.3 Streambank Restoration: Drawings for alternative solutions completed. Discussions with property owner (St. Leo's Church). Church is unsure how they wish to proceed. Fiscal status 42% complete.

1.4 Asbury Creek Fish Passage: Design drawings complete for modification of culvert near the confluence with Sonoma Creek. Implementation funds secured, construction will occur summer, 2000. Monitoring funds still needed for this project, requested in 2000 and again in 2001. Fiscal status **74%** complete.

1.5 Vineyard Demonstration Projects. All complete, monitoring ongoing. Many other projects have been proposed and need future funding hence 2000 and 2001 request. Fiscal status 74% complete.

Task 2 Watershed Technical Support

2.1 Technical Assistance: Technical assistance for selecting and monitoring vineyard demonstration sites. SSCRCD helped plan and facilitate Ranch Plan workshops. Continuation is crucial to implementation of BMPs, hence 2001 request. Fiscal status 60% complete.

2.2 Exotic Species Eradication: Field surveys of Arundo sites. Data entered into SEC's GIS. Eradication plan near completion. Additional CALFED funding secured by SEC for eradication. Fiscal status 85% comulete.

Task 3 Monitoring and Data Management

3.1 Baseline Monitoring of Potential Limiting Factors for Anadromous Fish: QAPP submitted and approved by EPA for Thermal Monitoring and Spawning Gravel Suitability Assessment. Results indicate that a critical threshold was not exceeded at any of the thermal monitoring sites. Final report will be issued in June, 2000. Spawning gravel data indicates that sediment is not limiting production of steelhead. The final report will be issued in June, 2000. Fiscal status 99% complete.

3.2 Restoration Projects Monitoring: SEC's Sonoma Valley Watershed Station opened, including a Stream Stewards program, created to support future monitoring. Presentation GIS map of Conservancy projects generated. Fiscal status 87% complete.

3.3 Data Management: Limiting factors project data and reports compiled. Preliminary data and results presented in poster session at 1999 State of the Estuary conference. Web site development in final phase. Fiscal status 98% complete.

3.4 Watershed Assessment: Problems obtaining sufficient access to properties necessitated a change from Nathanson Creek to Carriger Creek. SFEI has outlined the expected need for additional funding to complete the project. SFEI expects to be in the field May-August 2000. Fiscal status 47% complete.

Task 4 Outreach and Education, Watershed Coordinator

4.1 Plans to reunite the Sonoma Creek Watershed Advisory Committee, a group of local residents who helped compile the Sonoma Creek Watershed Enhancement Plan. The Conservancy has recently agreed to partner with the Army Corps of Engineers on the Sonoma Creek Watershed Restoration Study. Three of four newsletters circulated. Fiscal status 85% complete.

4.2 Watershed Education for Students and Interns: SEC provided 8 internships for students from Sonoma State University and Santa Rosa Junior College. Fiscal status 94% complete.

Task **5** Pro-iect Management and Administration

Ongoing. Completed quarterly report for January 1 – March 3 1,2000. Fiscal status 89% complete.

Project Status: **CALFED 2000-E04,** $438,923

This grant has just been awarded and contract negotiations are underway. This project is expected to begin in June 2000. See the task list below.

Habitat Restoration

1) Fish Passage Enhancement, Asbury Creek at Arnold Drive – SEC
2) Pool Habitat Enhancement and Restoration, Sonoma Creek and tributaries — SEC
3) Bank Erosion Repair and Riparian Restoration, Carriger Creek at Arnold Drive — RCD
4) Bank Stabilization, Nathanson Creek — RCD

Local Watershed Stewardship

5) Vineyard Demonstration Projects — SWGA
6) Expand Sonoma Valley Stream Stewards Program — SEC
   a) Continuing Analysis of Factors Limiting Steelhead
   b) Produce Watershed Map Through Volunteer Watershed Assessment
   c) Monitor Conservancy Projects

Environmental Education

7) Workshops for Local Government Staff on Using Existing Regulations to Preserve and Enhance Watershed Health — SEC
8) Education Coordination for Watershed Studies — SCAAW
9) Publication of Anecdotal Ecological History of Sonoma Valley — SEC

Pro-iect Management

10) Watershed Coordinator — RCD
11) Grant Administration — RCD

APPLICATION FOR FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

2. DATE SUBMITTED	Applicant Identifier
5-11-00	
3. DATE RECEIVED BY STATE	State Application Identifier
4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier

1. TYPE OF SUBMISSION:

Application: ☐ Construction ☒ Non-Construction

Preapplication: ☐ Construction ☐ Non-Construction

5. APPLICANT INFORMATION

Legal Name: Southern Sonoma County Resource Conservation Dist.

Organizational Unit: Substate Special District

Address (give city, county, State, and zip code): 1301 Redwood Way, Suite 170, Petaluma, CA 94954

Name and telephone number of person to be contacted on matters involving this application (give area code): Leandra Swent (707) 794-1242

6. EMPLOYER IDENTIFICATION NUMBER (EIN): 94-2785937

7. TYPE OF APPLICANT: (enter appropriate letter in box) [ ]

A. State
B. County
C. Municipal
D. Township
E. Interstate
F. Intermunicipal
G. Special District
H. Independent School Dist.
I. State Controlled Institution of Higher Learning
J. Private University
K. Indian Tribe
L. Individual
M. Profit Organization
N. Other (Specify) _____

8. TYPE OF APPLICATION:

☐ New ☒ Continuation ☐ Revision

If Revision, enter appropriate letter(s) in box(es) [ ] [ ]

A. Increase Award B. Decrease Award C. Increase Duration
D. Decrease Duration Other (specify):

9. NAME OF FEDERAL AGENCY:

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: XX-XXX

TITLE:

11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: Sonoma Creek Watershed Conservancy

12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.): Sonoma County, California

13. PROPOSED PROJECT		14. CONGRESSIONAL DISTRICTS OF:
Start Date: 10 01	Ending Date: 10 03	a. Applicant: 06
		b. Project:

15. ESTIMATED FUNDING:

a. Federal	$	545,170.00
b. Applicant	$	89,000.00
c. State	$	200,000.00
d. Local	$	101,000.00
e. Other	$	.00
f. Program Income	$	.00
g. TOTAL	$	35,170.00

16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?

a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:

DATE _____

b. No, ☐ PROGRAM IS NOT COVERED BY E. O. 12372

☒ OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?

☐ Yes If "Yes," attach an explanation. ☒ No

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.

a. Type Name of Authorized Representative	b. Title	c. Telephone Number
Leandra Swent	District Manager	(707) 794-1242
d. Signature of Authorized Representative		**e. Date Signed**
		5-11-00

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Standard Form 424 (Rev. 7-97)

BUDGET INFORMATION - Non-Construction Programs

OMB Approval No. 0348-0044

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. WATERSHED CONSERVANCY		$	$	$	$	$ 545,170
2.						
3.						
4.						
5. Totals		$	$	$	$	$

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY (1)	(2)	(3)	(4)	Total (5)
a. Personnel	$	$	$	$	$ 312,521
b. Fringe Benefits					17,430
c. Travel					200
d. Equipment					
e. Supplies					125,852
f. Contractual					43,620
g. Construction					
h. Other					
i. Total Direct Charges *(sum of 6a-6h)*					499,623
j. Indirect Charges					45,547
k. TOTALS *(sum of 6i and 6j)*	$	$	$	$	$ 545,170

7. **Program Income**	$	$	$	$	$

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Standard **Form 424A (Rev.** 7-97)

Previous Edition Usable

Prescribed by **OMB** Circular **A-102**

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8. WATERSHED CONSERVANCY	$ 89,000	$ 200,000	$ 101,000	$ 390,000
9.				
10.				
11.				
12. TOTAL *(sun, of lines 8- 11)*	$	$	$	$ 390,000

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	41h Quarter
13. Federal	$ 260,826	$ 65,206	$ 65,207	$ 65,206	$ 65,207
14. Non-Federal	195,000	48,750	48,750	48,750	48,750
15. TOTAL *(sum of lines 13 and 14)*	$ 345,826	$ 113,956	$ 113,957	$ 113,956	$ 113,957

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (Years) (b) First	(c) Second	(d) Third	(e) Fourth
16. WATERSHED CONSERVANCY	$ 284,343	$	$	$
17.				
18.				
19.				
20. TOTAL *(sum of lines 16- 19)*	$ 284,343	$	$	$

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges:

22. indirect Charges:

23. Remarks:

STATE OF CALIFORNIA

NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 19 (REV. 3-95) FMC

COMPANY NAME

Southern Sonoma county Resource Conservation District

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California

Leandra Swent

OFFICIAL'S NAME

5-11-00

DATE EXECUTED

EXECUTED IN THE COUNTY OF

Sonoma

PROSPECTIVE CONTRACTOR'S SIGNATURE

District Manager

PROSPECTIVE CONTRACTOR'S TITLE

Southern Sonoma County Resource Conservation District

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

State of California
The Resources **Agency**
Department **of** Water Resources

Not Applicable

Agreement No. _____

Exhibit _____

SONCOLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED **WITH** BID FOR PUBLIC WORKS

STATE OF CALIFORNIA)
)ss
COUNTY OF _____)

_____ , being first duly sworn, deposes and
(name)

says that he or she is _____ of
(position title)

_____
(the bidder)

the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyoneshall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative'thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

DATED: _____ BY _____
(person signing for bidder)

Subscribed and sworn to before me on

_____

_____
(Notary Public)

(Notarial Seal)

SONOMA ECOLOGY CENTER

May 5,2000

Sonoma County Board of Supervisors
575 Administration Dr., Room 100A
Santa Rosa, CA 95403

Dear Supervisors,

This letter is to inform you that the Sonoma Creek Watershed Conservancy is seeking funds to continue its work. Please read the description below and contact us if you have any questions or concerns. This project is being undertaken at the request of stakeholders and local groups in the County.

The Sonoma Creek Watershed Conservancy is a partnership of local stakeholders including Southern Sonoma County Resource Conservation District (RCD), Sonoma Ecology Center (SEC), Sonoma Valley Vintners & Growers Association (SWGA), San Francisco Estuary Institute (SFEI), and Sonoma Creek Adopt-A-Watershed (SCAAW). This collaborative alliance of stakeholders has a proven track record of successful watershed planning and implementation work, including work funded by a previous CALFED grant. The Conservancy now proposes to implement riparian and aquatic habitat restoration activities, and to continue watershed research and stewardship activities and education programs in the Sonoma Creek watershed.

The project would funded by CALFED, a collaboration between fourteen California and federal agencies to manage the Sacramento-San Joaquin-San Francisco watershed.

We are requesting no funding or action from Sonoma County. This letter is merely to inform you of a planned project that will benefit water quality, wildlife and fisheries habitat, and community awareness in your area. If you have any questions or concerns please contact the Southern Sonoma County Resource Conservation District (794-1242, extension 3) or the Sonoma Ecology Center (996-9744).

Sincerely,

Richard Dale, Executive Director
Sonoma Ecology Center

205 **First** Street West, Sonoma. CA 93176 • (707) 996-9744 • **fax** (707) 996-1744
sec@vom.com • www.vom.com/sec • Sonoma **Valley** Watershed Station (707) 996-0712

Marilyn Goode
2303 Grove Street
Sonoma, CA 95476
707 996-5701

May 4.2000

Dear David:

In response to our conversation today I am writing to you to give my permission for the Southern Sonoma County Resource Conservation District to do some stream and habitat restoration on my property which includes a part of Carriger creek In the southern part of Sonoma Valley. I feel that the Steelhead in this stream would benefit if the old cement ford was made more fish friendly. Thank you for your interest.

Marilyn Goode

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

14 April 1999

Mr. David Luther
Southern Sonoma County RCD
1301 Redwood Way, Suite 170
Petaluma, CA 94952

Subject: Sonoma Creek Conservancy (SCC) Proposal to CALFED

Dear Mr. Luther:

This letter is in support of a proposal by the SCC to the CALFED Bay-Delta program for funding of restoration-related activities in the Sonoma Creek watershed. As you are aware, since the early 1980's I have been involved in the assessment of the ecological health of stream fish and riparian communities with the San Francisco Estuary. The Sonoma Creek watershed supports several priority aquatic species as identified by CALFED including steelhead trout, California red-legged frog, and the California freshwater shrimp. In addition, the Sonoma Creek-Napa River marsh complex is utilized by delta smelt, splittail, longfin smelt, chinook salmon, clapper rail, and salt marsh harvest mouse.

Historically, Sonoma Creek and its tributaries were known internationally as a premier steelhead stream. It is likely that Sonoma Creek historically supported a larger run of steelhead than the Napa River (estimated at 6,000 adults). Sonoma Creek currently supports a run of steelhead of unknown size. Recent surveys conducted by EPA have confirmed that the Sonoma Creek watershed contains significant amounts of good to high quality steelhead spawning and rearing habitat. Furthermore, the potential to successfully restore degraded steelhead spawning and rearing habitat on Sonoma Creek and its tributaries through the implementation of various remediation and management programs is high. In addition to steelhead, the following native species occur within the Sonoma Creek watershed: pacific lamprey; resident rainbow trout; California roach; Sacramento squawfish; Sacramento sucker; prickly sculpin; riffle sculpin; and tule perch. The intact nature of native fish assemblages within the Sonoma Creek watershed is unusual and is comparable to the best remaining streams within the Central Valley in terms of the number of native fish species.

Considered together, Sonoma Creek, and the Napa and Petaluma Rivers, as well as other North Bay streams, and their associated wetlands, have the potential to play a critical role in CALFED's efforts to recover priority species and their habitats. For example, it is not unreasonable to project that with focused efforts directed at habitat restoration and management steelhead populations in the North Bay could be restored to between 3,000 and 5,000 adults (note: the Napa River historically supported 6,000 adults alone). Estimates of the average annual steelhead run size for the Sacramento-San Joaquin River system, including San Francisco Bay tributaries, range between 10,000-40,00 adults (Hallock et al. 1961, McEwan and Jackson 1996). This implies that under a reasonable "restoration" scenario, assuming that currently there are on average 30,000 adults in the Sacramento-San Joaquin River system, North Bay streams could potentially contribute to anywhere between 10% and 16% of the current total number of adult steelhead.

There are several other reasons why the North Bay could play a pivotal role in the restoration of CALFED priority species and habitats:

There are several other reasons why the North Bay could play a pivotal role in the restoration of priority species and habitats:

(1) From a zoogeographic and ecological perspective North Bay aquatic and wetland habitats are part of the Central Valley Fish Provence. As such, the fish fauna is characteristic of the Central Valley, except that it is more diverse in terms of the number of fish species, largely due to a greater diversity of aquatic and wetland habitats. Populations of certain priority fish species (*i.e.*, splittail, delta smelt, steelhead, longfin smelt, chinook salmon, and striped bass) may or may not be isolated on a regular basis from conspecifics within other geographic areas such as the delta, Suisun marsh, or the Sacramento-San Joaquin Rivers and their tributaries (the amount and regularity of interchange among species between various geographic regions is unclear), however they do represent important "populations" from the perspective of developing an effective conservation strategy to recover declining species. Every ecologist knows that it is better not to put "all your eggs in one basket". Rather, it makes more sense to establish multiple "populations" to insure against unforseen population declines.

(2) The North Bay habitats, particularly Sonoma Creek, the Napa River, and the Petaluma marsh complex form a contiguous area with high restoration potential for priority species and their habitats. The North Bay marsh complex is both physically and ecologically linked. Therefore, restoration efforts targeted within this geographic area have the potential to result in landscape level benefits to the overall ecosystem health.

(3) Unlike Central Valley drainages, most North Bay streams are characterized by a "natural" hydrograph. With the exception of the Napa River and Novato Creek, there are no large reservoirs that store or divert flows and modify natural flow patterns. Of particular note, is the lack of large reservoirs on Sonoma Creek. Existing water diversions tend to be small, although there may be adverse localized impacts on some tributary streams. Natural flow regimes are critical to the maintenance and restoration of priority species, such as steelhead, and their associated habitats. Even on the Napa River current flow patterns closely mimic historic patterns.

(4) The close geographic proximity of North Bay drainages to each other and to the bay and ocean, facilitates the movement of fish species to meet their life history requirements. For example, distances for spawning and out migration of anadromous species for North bay streams is relatively short (25-50 miles) compared to anadromous fishes in Central Valley streams that may have to migrate 100-250 miles during up- and downstream migrations. The geographic location of North Bay habitats may improve spawning success and survivorship.

(5) Restoration and management of North Bay priority habitats on a whole benefits a greater number of priority and other fish species because of the geographic location and diversity of habitat types. For example, restoration of North Bay tidal wetlands has the potential to benefit entire assemblages of fishes (*e.g.*, splittail, longfin smelt, delta smelt, steelhead, chinook salmon, striped bass) as part of a single project.

(6) There are large areas of potential restoration areas within the North Bay and the institutional mechanisms to implement restoration are largely in place. The SEC is an excellent example of a local institution well-positioned to effectively oversee restoration activities within the Sonoma Creek watershed.

I believe that the SEC's proposal for habitat restoration combined with workshops to educate, assist and engage the community at the local level is worthy of funding. Thank you for the

opportunity to comment on this proposal. You may contact me at (415) 744-1970 if you would like to discuss my comments further.

Sincerely,

Robert A. Leidy

Robert A. Leidy
Wetland Science Program Manager

LYNN WOOLSEY
6TH DISTRICT, CALIFORNIA

COMMITTEES:
BUDGET
EDUCATION AND THE WORKFORCE

WASHINGTON OFFICE:
439 CANNON BUILDING
WASHINGTON, DC 20515-0506
TELEPHONE: (202) 225-5161

Congress of the United States

House of Representatives

Washington, DC 20515-0506

DISTRICT OFFICES:
1101 COLLEGE AVE., SUITE 290
SANTA ROSA, CA 95404
TELEPHONE: (707) 542-7181

NORTHGATE BUILDING
1050 NORTHGATE DRIVE, SUITE 140
SAN RAFAEL, CA 94903
TELEPHONE: (415) 507-0654

E-MAIL ADDRESS:
lynn.woolsey@mail.house.gov

WEB PAGE ADDRESS:
http://www.house.gov/woolsey/

April 12, 1999

CALFED Bay-Delta Program
1416 Ninth Street, Suite 1155
Sacramento, CA 95814

Dear CALFED Technical Review Panel:

I am writing to express my support for the Southern Sonoma County Resource Conservation District's (SSCRCD) proposal for funding from the CALFED Bay-Delta Program. SSCRCD has been working effectively in the Sonoma Creek Watershed since 1994, bringing residents together to complete a community-based watetshcd plan and implement vineyard demonstration projects to reduce sedimentation and improve wildlife habitat.

As I understand, funding from CALFED will allow SSCRCD to implement recommendations of the Watershed Planning Project for Sonoma Creek, which will protect the creek's sustainable steelhead run and its threatened **and** endangered species. Their efforts could serve **as** a model for a grass-roots action to improve watershed resources. This important undertaking already includes vital voluntary participation by the local agricultural community.

Thank you for your careful consideration of SSCRCD's application for funding. It is my sincere hope that SSCRCD will receive the finding it needs to continue and expand its environmental preservation efforts for the Sonoma Creek watershed.

Sincerely,

Lynn Woolsey

Lynn Woolsey
Member of Congress

LW:tf

SWRCB

California Regional Water Quality Control Board

San Francisco Bay Region

Gray Davis
Governor

Winston H. Hickox
Secretary for
Environmental
Protection

Internet Address: http://www.swrcb.ca.gov
1515 Clay Street, Suite 1400, Oakland, California 94612
Phone (510) 622-2300 - FAX (510) 622-2460

April 12, 1999

CALFED Bay-Delta Program
1416 Ninth Street, Suite 1155
Sacramento, CA 95814

Dear CALFED Technical Review Panel:

I am writing to express my support for the Southern Sonoma County Resource Conservation District's (SSCRCD) proposal for funding from the CALFED Bay-Delta Program. SSCRCD bas a long history of working with landowners and residents to both improve agricultural operations and protect the environment.

The Sonoma Creek Watershed Restoration Program promises to have many benefits. The watershed contains many species of concern such as the threatened steelhead trout which will benefit from rhc habitat enhancements envisioned *in* this projea. Tbc watershed has also experienced serious erosion which will be addressed to benefit water quality.,

Please know that I am extremely supportive of colaborative, coordinared approaches to watershed restoration, knowing that they *arc* the only way we can achieve positive results with private property owners and ensure that public agencies *do* not engage in contradictory permitting and regulatory actions. Additionally, the shared resources of public agencies, privau groups and local schools ensure that watershed enhancement and public education is effectively implemented.

Thank you for your careful consideration of SSCRCD's application for funding. It is my sincere hope that your funding will allow SSCRCD to go forward to do this much needed work in the Sonoma Creek Watershed.

Sincerely yours,

William B Hurley

Bill Hurley
Associate Water Resources Control Engineer
Regional Water Quality Control Board

Environmental Compliance Checklist

All applicants must fill out this Environmental Compliance Checklist. Applications must contain answers to the following questions to be responsive and to be considered for funding. ***Failure to answer these questions*** *and* ***include them with the application will result*** *in* ***the application being considered nonresponsive and*** *not* ***considered for funding.***

1. Do any of the actions included in the proposal require compliance with either the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), or both?

_____	X
YES	**NO**

2. If you answered yes to # 1, identify the lead governmental agency for CEQA/NEPA compliance.

_____
Lead Agency

3. If you answered no to # 1, explain why CEQA/NEPA compliance is not required for the actions in the proposal.

4. If CEQAJXEPA compliance is required, describe how the project will comply with either or both of these laws. Describe where the project is in the compliance process and the expected date of completion.

5. Will the applicant require access across public or private property that the applicant does not own to accomplish the activities in the proposal?

X	_____
YES	**NO**

If yes, the applicant must attach written permission for access from the relevant property owner(s). Failure to include written permission for access may result in disqualification of the proposal during the review process. Research and monitoring field projects for which specific field locations have not been identified will be required to provide access needs and permission for access with **30** days of notification of approval.

6. Please indicate what permits **or** other approvals may be required **for** the activities contained in your proposal. Check all boxes that apply.

LOCAL		
Conditional use nermit	—	
Variance	—	
Subdivision Map Act approval	—	
Grading permit	—	
General plan amendment	—	
Specific plan approval	—	
Rezone	—	
Williamson Act Contract cancellation	—	
Other _____ (**please** specify)		
None required	—	
STATE		
CESA Compliance	—	(CDFG)
Streambed alteration permit	X	(CDFG)
CWA § **401** certification	X	(RWQCB)
Coastal development permit	—	(Coastal Commission/BCDC)
Reclamation Board approval	—	
Notification	—	(DPC, BCDC)
Other _____ (please specify)		
None required	—	
FEDERAL		
ESA Consultation	—	(USFWS)
Rivers & Harbors Act permit	—	(ACOE)
CWA § 404 permit	—	(ACOE)
Other _____ (please specify)		
None required	—	

DPC = Delta Protection Commission
CWA = Clean Water Act
CESA = California Endangered Species Act
USFWS = U.S. Fish and Wildlife Service
ACOE = U.S. Army Corps of Engineers

ESA = Endangered Species Act
CDFG = California Department of Fish and Game
RWQCB =Regional Water Quality Control Board
BCDC= Bay Conservation and Development Comm.

Land Use Checklist

All applicants must fill out this Land Use Checklist for their proposal. Applications must contain answers to the following questions to be responsive and to be considered for funding. *Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.*

1. **Do** the actions in the proposal involve physical changes to the land (i.e. grading, planting vegetation, or breeching levees) or restrictions in land use (i.e. conservation easement or placement **of** land in **a** wildlife refuge)?

   X
   YES , NO

2. If **NO** to # **1,** explain what type of actions are involved in the proposal (i.e., research only, planning only).

3. **If YES to # 1, what is the proposed land use change or restriction under the proposal?**
   Planting trees to reestablish a riparian corridor.

   Building a fish ladder.

4. **If YES to # 1, is the land currently under a Williamson Act contract?**

   _____ YES
   X **NO**

5. **If** YES to # **1,** answer the following:

   Current land use _____
   Current zoning _____
   Current general plan designation _____

6. If YES **to #1,** is the land classified **as** Prime Farmland, Farmland **of** Statewide Importance or Unique Farmland on the Department of Conservation Important Farmland Maps?

   _____ YES
   X **NO**
   DON'T KNOW

7. **If YES to # 1, how many acres of land will be subject to physical change or land use restrictions under the proposal?**
   less than 1 acre

8. If YES to # **1,** is the property currently being commercially farmed or grazed?

   _____ YES
   X **NO**

9. If YES *to* #8, what are the number **of** employees/acre _____
   the total number **of** employees _____

10. Will the applicant acquire any interest in land under the proposal [fee title **or** a conservation easement)?

_____ YES X NO

11. What entity/organization will hold theinterest?_____

12. *If* **YES** to # **10,** answer the following:

Total number **of** acres to be acquired under proposal _____
Number *of* acres to be acquired in fee _____
Number of acres to be subject to conservation easement _____

13. For all proposals involving physical changes to the land or restriction **in** land use, describe what entity **or** organization will:

manage the property — Landowner

provide operations and maintenance services — Landowner

conduct monitoring — Landowner / SSCRCD / SEC

14. **For** land acquisitions (fee title **or** easements), will existing water rights also be acquired?

_____ YES X NO

15. **Does** the applicant propose any modifications to the water right **or** change in the delivery *of* the water?

_____ YES X NO

16. If YES to # 15, describe_____